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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/740,660	12/18/2000	Ganapati R. Mauze	10004415-1	3498

7590 07/12/2004

AGILENT TECHNOLOGIES  
Legal Department, 51U-PD  
Intellectual Property Administration  
P. O. Box 58043  
Santa Clara, CA 95052-8043

EXAMINER

CEPERLEY, MARY

ART UNIT PAPER NUMBER

1641

DATE MAILED: 07/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/740,660

Applicant(s)

MAUZE ET AL.

Examiner

Mary (Molly) E. Ceperley

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 April 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5,8,10,11,13-27 and 32-49 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5,8,10,11,13-27 and 32-49 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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**1)** Although specific claims are cited in the rejections below, these rejections are also applicable to all other claims in which the noted problems/language occur.

**2)** The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

**3)** Claim 32 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. There is no antecedent basis in claim 21 for the term "said fluorescence energy transfer...binding assay".

**4)** Claims 1-5, 8, 10, 11, 13-27 and 32-49 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification describes the "matrix having a surface" as being limited to a "synthetic polymer". The term "polymeric matrix" of claim 1 is inclusive of non-synthetic polymers such as peptides which are not supported by any enabling written description. See page 6, line 10 of the specification.

**5)** Claims 1-5, 8, 10, 11, 13-27 and 32-49 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for "a surface coating" which contains a fluorescent donor molecule, does not provide a description of nor reasonably provide enablement for the scope of the term "a surface coating" which contains a fluorescent molecule "wherein said fluorescent molecule is capable of emitting energy", a newly presented, broader claim limitation. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to practice the invention commensurate in scope with these claims. For the composition to be useful as a FRET reagent

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as described/required by the description of the invention in the instant specification, the "surface coating" must contain a fluorescent donor molecule. See page 2, lines 21-24; page 6, line 18; page 8, lines 14-16.

**6)** Claim 37 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 34.

When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

**7)** The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**8)** Claims 1-5, 8, 15-19, 21, 25, 27, 32-39 and 47 are rejected under 35 U.S.C. 102(b) as being anticipated by Mandle et al (US 4,372,745).

Mandle et al describes a polymeric matrix with a coating of fluorescent molecules; this matrix is further encapsulated with a protective layer. This composition anticipates the composition of instant claim 1. See Mandle et al: EXAMPLES XIX, XX AND XXI; col. 17, lines 56-64; col. 18, lines 32-37; for appropriate fluorescent moieties including organo-metallic complexes ("metal chelates"), see col. 12, line 43 – TABLE 2; for the attachment of a biomolecule {instant claim 37}, see col. 3, lines 60-65. Although

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Mandle et al does not describe the limitation "wherein said protection layer reduces quenching of said fluorescent molecule" as recited in instant claim 1, the encapsulated fluorescent agents of Mandle et al inherently have this same protective effect since they are comprised of the same materials as the composition of instant claim 1.

**9)** Claims 1-5, 8, 15-19, 21, 25, 27, 32-39 and 47 are rejected under 35 U.S.C. 102(e) as being anticipated by Chandler (US 6,528,165 B2).

Chandler describes a polymeric matrix with a coating of fluorescent molecules; this matrix is further encapsulated with a "light-permeable" protective layer. This composition anticipates the composition of instant claim 1. See col. 3, lines 9-19; col. 3, line 36 – col. 4, line 8; col. 6, line 42 – col. 8, line 10; col. 8, lines 24-29; Examples 1-6; for the attachment of a biomolecule, see the use of the compositions in flow cytometry (col. 8, line 62 – col. 9, line 8) and immunological analysis (abstract). Although Chandler does not describe the limitation "wherein said protection layer reduces quenching of said fluorescent molecule" as recited in instant claim 1, the encapsulated fluorescent agents of Chandler inherently have this same protective effect since they are comprised of the same materials as the composition of instant claim 1.

**10)** Applicants' amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing

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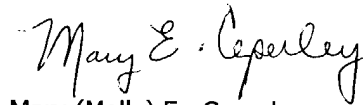
date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

**11)** An inquiry of a general nature which is **not related to the prosecution on the merits** should be directed to Technology Center 1600 telephone number (571) 272-1600. The general fax number for the USPTO is (703) 872-9306.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mary (Molly) E. Ceperley whose telephone number is (571) 272-0813. The examiner can normally be reached from 8 a.m. to 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long V. Le, can be reached on (571) 272-0823.

July 09, 2004



Mary (Molly) E. Ceperley  
Primary Examiner  
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